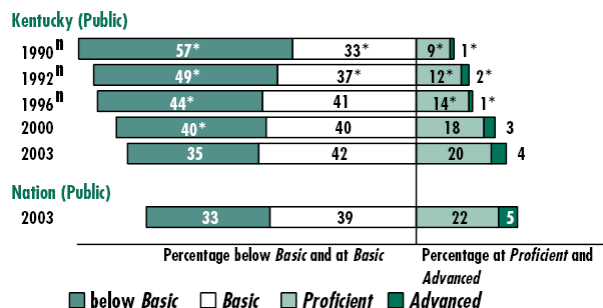


The National Assessment of Educational Progress (NAEP) assesses mathematics in five content areas: number sense, properties, and operations; measurement; geometry and spatial sense; data analysis, statistics and probability; and algebra and functions. The NAEP mathematics scale ranges from 0 to 500.

### Overall Mathematics Results for Kentucky

- In 2003, the average scale score for eighth-grade students in Kentucky was 274. This was higher<sup>1</sup> than the average score in 2000 (270), and was higher than the average score in 1990 (257).
- Kentucky's average score (274) in 2003 was not found to be significantly different from that of the nation's public schools (276).
- Of the 53 states and jurisdictions<sup>2</sup> that participated in the 2003 eighth-grade assessment, students' average scale scores in Kentucky were higher than those in 11 jurisdictions, not significantly different from those in 10 jurisdictions, and lower than those in 31 jurisdictions.
- The percentage of students in Kentucky who performed at or above the NAEP *Proficient* level was 24 percent in 2003. This percentage was not found to be significantly different from 2000 (20 percent), and was greater than that in 1990 (10 percent).

### Student Percentage at NAEP Achievement Levels



<sup>1</sup> Accommodations were not permitted for this assessment.

**NOTE:** The NAEP mathematics scale ranges from 0 to 500, with the achievement levels corresponding to the following points: *Below Basic*, 261 or lower; *Basic*, 262-298; *Proficient*, 299-332; *Advanced*, 333 or above.

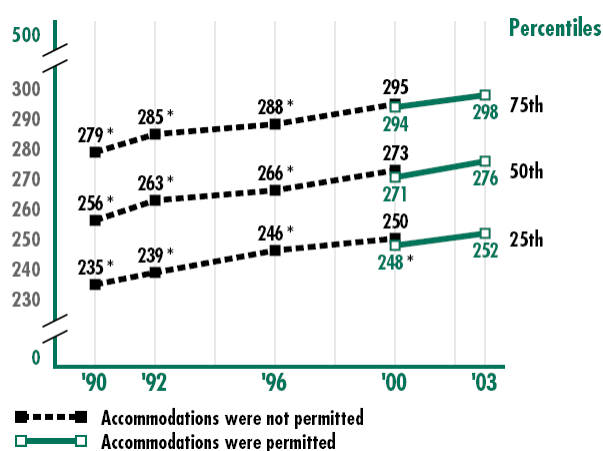
### Performance of NAEP Reporting Groups in Kentucky

| Reporting groups                | Percentage of students | Average Score | Percentage of students at |              |                   |                 |
|---------------------------------|------------------------|---------------|---------------------------|--------------|-------------------|-----------------|
|                                 |                        |               | Below <i>Basic</i>        | <i>Basic</i> | <i>Proficient</i> | <i>Advanced</i> |
| Male                            | 50                     | 275           | 35                        | 40           | 20                | 4               |
| Female                          | 50                     | 274 ↑         | 34                        | 43           | 20                | 3               |
| White                           | 88                     | 277 ↑         | 32                        | 43           | 22                | 4               |
| Black                           | 9                      | 250           | 62                        | 33           | 5                 | #               |
| Hispanic                        | 1                      | ---           | ---                       | ---          | ---               | ---             |
| Asian/Pacific Islander          | 1                      | ---           | ---                       | ---          | ---               | ---             |
| American Indian/Alaska Native   | #                      | ---           | ---                       | ---          | ---               | ---             |
| Free/reduced-price school lunch |                        |               |                           |              |                   |                 |
| Eligible                        | 42                     | 261 ↑         | 49 ↓                      | 39           | 10                | 1               |
| Not eligible                    | 55                     | 284           | 24                        | 43           | 27                | 6               |

### Average Score Gaps Between Selected Groups

- In 2003, male students in Kentucky had an average score that was not found to be significantly different from that of female students. In 1990, there was also no significant difference between the average score of male and female students.
- In 2003, White students had an average score that was higher than that of Black students (27 points). This performance gap was wider than that of 1990 (18 points).
- The sample size was not sufficient to permit a reliable estimate for Hispanic students in Kentucky.
- In 2003, students who were not eligible for free/reduced-price school lunch had an average score that was higher than that of students who were eligible (23 points). This performance gap was not significantly different from that of 1996 (23 points).

### Mathematics Scale Scores at Selected Percentiles



An examination of scores at different percentiles on the 0–500 NAEP mathematics scale at each grade indicates how well students at lower, middle, and higher levels of the distribution performed.

# The estimate rounds to zero.

--- Reporting standards not met; sample size insufficient to permit a reliable estimate.

\* Significantly different from 2003.

↑ Significantly higher than, ↓ lower than 2000.

<sup>1</sup> Comparisons (higher/lower/not different) are based on statistical tests. The .05 level was used for testing statistical significance. Performance comparisons may be affected by differences in exclusion rates for students with disabilities and limited-English-proficient students in the NAEP samples and changes in sample sizes. NAEP sample sizes have increased in 2003 compared to previous years, resulting in smaller detectable differences than in previous assessments.

<sup>2</sup> "Jurisdictions" includes participating states and other jurisdictions (such as the District of Columbia and the Department of Defense Dependents Schools).

**NOTE:** Detail may not sum to totals because of rounding, and because the "Information not available" category for Free/reduced-price lunch is not displayed.

Statistical comparisons are calculated on the basis of unrounded scale scores or percentages.

Visit <http://nces.ed.gov/nationsreportcard/states/> for additional results and detailed information.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, 1996, 2000, and 2003 Mathematics Assessments.